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Inês da Costa Carvalho Moreira Pinto

Mental stigma in medical students – Medical School of Oporto University

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Mental stigma in medical students - Medical School of Oporto University

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Background: The Portuguese Mental Health Plan emphasizes that health care professionals can be a source of stigma against people with mental illness enhancing self-stigma, leading to a decrease in adherence to treatment. The study of this topic has gained relevance, being of particular importance to research focused on school.

Objective: To know the differences of mental stigma attitudes, among medical students from Medical School of Oporto University in the first and last years of study.

Methods: In this exploratory study, we surveyed 111 first and last year students from Medical School of Oporto University, Portugal, using the Portuguese version of the Attribution Questionnaire AQ-27.

Results: At the end of the course the students showed a significant lower score in the dimension Segregation and in some items related with Pity. Coercion presents higher score in the item related with need of medication. This results express their positive will to integrate people with mental illness in community and a valorisation of the pharmacological treatment in this kind of diseases. The previous personal experience of psychiatric problems decreases the level of segregation and psychological problems increase the motivation to help.

Conclusion: The senior students express less discriminatory and more positive attitudes comparing to the first year, probably due to education and contact opportunities promoted throughout the medical school, as well as to personal experiences, in terms of mental health problems. Knowledge of stigma levels of future doctors is therefore crucial for the prevention of attitudes that could condition the provision of medical care.

Keywords: Medical students, Social stigma, Mental illness

Introduction

Stigma is a global problem with severe implications in the lives of the ones who suffer from mental illness but also the ones around them. It is a public health problem because it leads to loss of productivity and employability.(1) In health care system, the patients often suffer negligence since their symptoms are attributed to mental illness and not given the proper attention leading to decreased life expectancy.(2, 3)

Stigma can be defined in several ways. According to Goffman, it is considered as a feature that discredits and diminishes the person to a level where he is not considered suitable to live in society. The feature can be a physical dysfunction or deformity, a mental illness, a race, tribe, group or ethnicity.(4) Elliot and colleagues' definition is that the person is seen as unable to have normal social interactions, even dangerous or unpredictable so he can be set apart and ignored by the group.(4) Jones and colleagues came up with six dimensions to the feature that leads to stigmatization: if it is easy to recognize by others; if it is a short time situation or a long course one; how does it affect the social interaction; the subjective perception of the characteristic; it's origin and if it is caused by the individual; and if it induces dangerous or threatening feelings.(4)

Stigma can be divided in public and self-stigma each one composed by the same three elements according to Corrigan and revised by Thornicroft and colleagues (3, 4): stereotypes associated to misinformation or lack of information; prejudice as a problem of attitudes, experiencing negative feelings; and discrimination that comes from the prejudice and it is a problem of behaviour towards the person or itself.

Public stigma consists in the way that a society faces the person with mental illness and it is associated with stereotypes and the subsequent negative expectations like incompetence, lack of moral character, dangerousness and blameworthiness. (5, 6) It is common that the society's beliefs confine the job opportunities, independent life with private housing or education to the people with mental illness and this creates the biggest obstacles to their well-being, health and quality of life.(7-9)

This attitudes also limit the rehabilitation and reinsertion in the community, directly related to a satisfactory course of the disease to the ones that were institutionalized and wish to return to a normal society life.(7)

The self-stigma is when someone accepts as true the opinions and beliefs of others about his disease, agrees and internalizes, which causes prejudice, negative feelings about the self and eventually self-discrimination.(4-6, 9) This process was described by Corrigan and colleagues as the "why try" effect that conduces to a depreciation with consequences like low self-esteem as well as giving up on personal goals in education, relationships or economic independence once they believe they are not able to correspond to the society expectations.(5, 8, 9)Besides this, self-stigma discourages the person with mental illness from seeking and adhering to treatment, inhibits will to recover and overcome the challenges of his illness.(1, 9, 10, 11)

Having this in mind, in addition to working on a society level, we also need to focus in the specific areas that handle with this situation everyday as healthcare professionals that present the same negative attitudes and stigma as the rest of the community.(2, 3, 7, 9)

Some studies show that not only information but also the contact with people with mental illness are effective in the promotion of acceptance as well as in changing attitudes, in the general population and specifically in high school and health care students. In fact, is clearly demonstrated that interpersonal contact either indirectly (video for example) or directly yields a greater improvement than just theoretical contents. (2, 6, 7, 12) Because of that, subjects like medical psychology or psychiatry

are essential in medical schools. Contact is also an important step against self-stigma since the more people with mental illness believe they are going to be stigmatized and discriminated, the more they hide their disease and withdraw from contact, social interaction, help and avoid society.(13)

There are several recent studies which access the impact of different population and student based interventions that show improvements in the attitudes in a short term evaluation, but the results are inconsistent and the ones with a long term follow up show decrease in the initial benefits of the intervention. (2, 3) The interventions have been shown not to reach enough people to modify the public stigma associated to a population.(6, 12) Also because few studies have been conducted in the medical school field, comparing the beginning of the course with the last year, it would be important to elucidate it instead of only evaluating the impact of specific interventions.(14) As so, it would be important to clarify the differences of mental stigma attitudes and behaviours against mental illness, among medical students from Medical School of Oporto University in the first year and the last year of the course.

Methods

Instruments

In order to obtain the data associated with this study, we used a questionnaire composed by two parts: the first one covering sociodemographic data and the second one with the *AttributionQuestionnaire* AQ-27 (preliminary version in Portuguese approved for use by the author of the original instrument). The sociodemographic part was used to evaluate gender, age, marital status, study year, place of birth, attendance in psychological or psychiatric consultations and its place, as well as contact with people with mental illness.

The AQ-27 evaluates nine dimensions of the stigma: responsibility (people with mental illness can control their symptoms and are responsible for having the illness), pity (people with mental illness are overtaken by their own disorder and therefore deserve concern and pity), anger (people with mental illness are blamed for having the illness and provoke wrath and rage), dangerousness (people with mental illness are not safe), fear (people with mental illness are dangerous), help (people with mental illness need assistance), coercion (people with mental illness have to participate in treatment management), segregation (people with mental illness are sent to institutions located far from the community), and avoidance (patients with mental illness do not live in society). Corrigan et al. have associated some of these constructs with discriminative attitudes (responsibility, dangerousness, fear, anger, coercion, segregation, and avoidance) and others with attitudes of closeness and assistance (help and pity). (15, 16)

The AQ-27 is composed by an initial vignette describing a person with severe mental illness, in this case with schizophrenia (there are different vignettes), and 27 questions about this person to score from 1 “no or nothing” to 9 “very much or completely”. Results are calculated considering the mean scores (not their sum) obtained for the items comprising each construct. Questions in the avoidance dimension are reverse scored.

Procedure

The questionnaire was available online through Google Drive, from the beginning of May until the end of June of 2014, where the students answered anonymously to the questions in about 10 minutes. The link to participate was advertised via social

networks and email to all of the students attending the Medical School of Oporto University from the first and the sixth year. All students were informed about the aim of the study and consented the use of the given information before answering the other questions. Our sample is not probabilistic, intentional and the results were analysed using the PASW Statistics software version 21. Descriptive statistics and comparative analyses were conducted using T-test.

Results

Our questionnaire was answered by 111 medical students from Medical School of Oporto University and the majority of the students were female 79(71,2%) and 32(28,8%) were male. Concerning the year they were attending, we had 61(55%) students from the first year and 50(45%) from the sixth year that had already attended the psychiatry internship. They were all single and between 18 and 27(mean=21,1, SD=2,67). Most of the people were from the north 64(57,7%), central Portugal 20(18%) and 17(15.3%) from the Portuguese islands.

With regard to the experience of having gone to a psychology consultation, 65(58,6%) people said they never went and 46(41,4%) did mostly to hospitals and private practices. With regard to the experience of having gone to a psychiatric consultation, 89(80,2%) never went and 22(19,8%) went mostly to private practices as well.

As far as self-perception of mental illness is concerned the majority of the students don´t recognize it 102(91,9%). Respecting the familiarity with mental illness 60(54,1%) people said they know someone with this kind of pathologies and the biggest percentage, 37(33,3%) of them, have a first degree relative. 46(41,4%) gave negative answer to knowing someone.

Considering the totality of our sample, we started by calculating the means for each dimension comprising the AQ-27 (Table 1). The item with the highest score was help with the mean value of 7 and the minimum of 3. On the contrary the one with lowest score was responsibility with the mean value of 2,5 and the maximum of 5. Pity, coercion and avoidance had also higher scores (means superior to 4) than dangerousness, fear, segregation and anger in descending order.

The comparative tests revealed very few statistically significant differences and will be the ones that we will analyse more carefully.

When comparing the first and sixth year in the different dimensions evaluated by AQ-27 we notice that the mean scores for the six year are always lower but the only one with significant difference(given by $p<0,05$) was segregation with $p=0,005$ showed in Table 2.

When analysing each item of the AQ-27(Table 3) we can see that we have significant difference in 2 indicators of segregation “I think Harry poses a risk to his neighbours unless he is hospitalized.” ($p=0.031$) and “I think it would be best for Harry’s community of he were put away in a psychiatric hospital.” ($p=0,004$) where the sixth year students had lower mean scores. Two items of coercion “If I were in charge of Harry’s treatment, I would require him to take his medication.” ($p=0,008$) and “If I were in charge of Harry’s treatment, I would force him to live in a group home.” ($p=0,036$) were significant as well having the first sentence a bigger score in the sixth year and the second a lower comparing to the first year. “How much concern would you feel for Harry?” as an indicator of pity was significantly higher in the first year ($p=0,023$).

When analysing the experience of having gone to a psychology consultation we verify differences in the help dimension with a significantly higher score ($p=0,018$) in the ones

that went like displayed on Table 4. The students that have gone to a psychiatric consultation had a significant lower segregation score in which p=0,027(Table 5).

Discussion

Our study had the purpose to know the differences of mental stigma attitudes and behaviours, among medical students in the first and last years of study. In fact stigma is still prevalent in health care professionals which can promote self-stigma and conditioning treatment and recover of the person with mental illness. In our study sample, help and pity are the most prevalent attitudes, which show a tendency of medical students to conduct protection and assistance.

The medical course has two main specific subjects to contact with mental illness, one in the fifth year is more theoretical, including a lecture with anti-stigma content and the contact is less direct, like observing appointments, and another one in the sixth where the students can have a more close contact with patients, having the opportunity to talk staying in the hospital and in the ambulatory besides the lectures.

That is concordant with the literature that established that both education about the diseases, that the students have in theoretical lectures, and contact with people suffering from them, during the psychiatrics' internships are effective in changing behaviour as well as attitudes and stigma.(2, 3, 6, 12) The studies also reinforce the importance of a prolonged contact and in more than one moment. (16, 18) On the other hand some of the studies with similar results in changing mentality in students and specifically medical students analysed short-term anti-stigma interventions or specifically the psychiatric internship.(3, 19)

Our data comparing the nine dimensions of AQ-27 between the students in the end of the course and the ones that had just entered demonstrates a significant lower score in segregation in senior students. That means that the sixth year students, that had already had the sixth year psychiatric internship, have more tendency to include people with mental illness in the community devaluing the need for institutionalization what is concordant with the tendencies of the Portuguese Mental Health Plan. It says that Portugal, as well as many other countries, created policies to the deinstitutionalization of patients with mental illness towards rehabilitation in the society.(20)

We can also notice, in the sixth year students, a tendency for less stigmatizing attitudes and behaviours when comparing with the students in the first year considering the analysis of each item. The sixth year students have less pity against people with mental illness which can support the fact that students have more information and education about mental illness, hence this dimension is usually attributed to the lack of it.(10) Education by itself can be an important strategy to decrease stigma as noticed in a review by Yamaguchi and colleagues and relates to the fact that they understand better the disease and they acknowledge the existence of treatment. (21)

The indicators of coercion, specifically increased in sixth year students, "If I were in charge of Harry's treatment, I would require him to take his medication." demonstrates the medical mentality acquired during Medical School, is the way that the students learn and know how to help others: through medication. The importance of carrying on the prescription and attending to the appointments is deeply rooted as well as the knowledge that patients frequently abandon their treatment, particularly when it is a chronic one as they usually are in mental illness.

The other difference that we notice was in the help and segregation dimensions in people with the experience of having gone to a psychology or psychiatric consultation. That, once again, is corroborated with the literature that says that the familiarity with

the situation diminish the levels of stigma and discrimination.(7, 22) It is also stated that the contact with a close situation, in this case with the self, is intimately related to predisposition to help people with mental illness.(23, 24) The significant higher value in help related with familiarity was also shown in an Portuguese Master thesis developed with university students including the ones studying medicine by Barbosa T.(14)

In our study we had some limitations like a small sample that could probably be augmented if more than one medical School was studied or if we had studied the Oporto Medical School more than one year. On the other hand, a longitudinal study to assess the same students from first to their sixth year, it would be more useful than a cross-sectional study like ours.

Conclusion

This study used the AQ-27 to assess differences in the level of stigma between the first and sixth years of the students in Medical School of Oporto University. The senior students express less discriminatory and more positive attitudes comparing to the first year, probably due to education and contact opportunities promoted throughout the medical school.

We also had the opportunity to clarify differences between people with more contact and familiarity with mental illness, stated by having gone to a psychological or psychiatric consultation demonstrated by a bigger predisposition to help and less will to segregate respectively. In future studies would be interesting to compare medical students with doctors working in different medical fields.

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1. Evans-Lacko S, Brohan E, Mojtabai R, Thornicroft G. Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. Psychological medicine. 2012;42(8):1741-52.
2. Friedrich B, Evans-Lacko S, London J, Rhydderch D, Henderson C, Thornicroft G. Anti-stigma training for medical students: the Education Not Discrimination project. The British journal of psychiatry Supplement. 2013;55:s89-94.
3. Kassam A, Glozier N, Leese M, Loughran J, Thornicroft G. A controlled trial of mental illness related stigma training for medical students. BMC medical education. 2011;11:51.
4. Brohan E, Slade M, Clement S, Thornicroft G. Experiences of mental illness stigma, prejudice and discrimination: a review of measures. BMC health services research. 2010;10:80.
5. Corrigan PW, Shapiro JR. Measuring the impact of programs that challenge the public stigma of mental illness. Clinical psychology review. 2010;30(8):907-22.
6. Corrigan PW, Morris SB, Michaels PJ, Rafacz JD, Rusch N. Challenging the public stigma of mental illness: a meta-analysis of outcome studies. Psychiatric services. 2012;63(10):963-73.
7. Martinez-Zambrano F, Garcia-Morales E, Garcia-Franco M, Miguel J, Villellas R, Pascual G, et al. Intervention for reducing stigma: Assessing the influence of gender and knowledge. World journal of psychiatry. 2013;3(2):18-24.
8. Crabtree JW, Haslam SA, Postmes T, Haslam C. Mental Health Support Groups, Stigma, and Self-Esteem: Positive and Negative Implications of Group Identification. Journal of Social Issues. 2010;66(3):553-69.
9. Michaels PJ, López M, Rüsch N, Corrigan PW. Constructs and concepts comprising the stigma of mental illness. Psychology, Society & Education. 2012;4(2):183-94.

10. Sousa SD, Marques A, Rosário C, Queirós C. Stigmatizing attitudes in relatives of people with schizophrenia: a study using the Attribution Questionnaire AQ-27. Trends in Psychiatry and Psychotherapy, 2012;34(4):186-197
11. Sousa S. Auto-Estigma na Doença Mental Grave: Desenvolvimento de um Programa de Intervenção com recurso ao Sociodrama e ao *E-Learning.* Tese de doutoramento em Psicologia. Porto: FPCEUP. 2012
12. Corrigan PW. Research and the elimination of the stigma of mental illness. The British journal of psychiatry : the journal of mental science. 2012;201(1):7-8.
13. Evans-Lacko S, London J, Japhet S, Rusch N, Flach C, Corker E, et al. Mass social contact interventions and their effect on mental health related stigma and intended discrimination. BMC public health. 2012;12:489.
14. Barbosa T. Estigma face à doença mental por parte de futuros profissionais de saúde mental. Dissertação de Mestrado em Temas de Psicologia, area de Psicologia da Saúde. Porto: FPCEUP.2010
15. Corrigan P. Attribution questionnaire (AQ-27). http://www.stigmaandempowerment.org/resources. Accessed 2011 Oct.
16. Sousa S, Queirós C, Marques A, Rocha N, Fernandes A. Versão preliminar portuguesa do AttributionQuestionnaire (AQ-27), adaptada com autorização de P. Corrigan. Porto: FPCEUP/ESTSPIPP; 2008
17. Corrigan PW, River PP, Lundin RK. Three Strategies for Changing Attributions about Severe Mental Illness. Schizophrenia Bulletin. 2001;27(2):187–195.
18. Martins V. Eficácia do programa anti-estigma “Porta aberta à saúde mental” na comunidade escolar juvenil: estudo exploratório. Dissertação da licenciatura em Terapia Ocupacional Porto: ESTSP-IPP.2014
19. Kerby J, Calton T, Dimambro B, Flood C, Glazebrook C. Anti-stigma films and medical students’ attitudes towards mental illness and psychiatry: randomised controlled trial. Psychiatric Bulletin. 2008;32(9):345-349.
20. CNRSSM. Proposta de Plano de Acção para a Reestruturação e Desenvolvimento dos Serviços de Saúde Mental em Portugal 2007- 2016. Lisboa: Ministério da Saúde.2007
21. Yamaguchi S, Mino Y, Uddin S. Strategies and Future Attempts to Reduce Stigmatization and Increase awareness of Mental Health Problems among Young People: A Narrative Review of Educational Interventions. Psychiatry and Clinical Neurosciences. 2011;65(5):405-15
22. Mino Y, Yasuda N, Tsuda T, Shimodera S. Effects of a one-hour educational program on medical students' attitudes to mental illness. Psychiatry and Clinical Neurosciences. 2001;55(5):501-507.
23. Pinfold V, Toulmin H, Thornicroft G, Huxley P, Farmer P, Graham T. Reducing psychiatric stigma and discrimination: evaluation of educational interventions in UK secondary schools. Br J Psychiatry.2003;182:342-346.
24. Corrigan P, Markowitz FE, Watson A, Rowan D, Kubiak MA. An attribution model of public discrimination towards persons with mental illness. Journal of Health and Social Behavior.2003;162-179.

Table 1 - Means obtained for each dimension in the AQ-27

	Minimum (1)	Maximum (9)	Mean	SD
Responsibility	1,00	5,00	2,51	0,871
Pity	1,67	9,00	5,82	1,615
Anger	1,00	6,67	2,72	1,218
Dangerousness	1,00	9,00	3,66	1,746
Fear	1,00	9,00	3,63	1,825
Help	3,33	9,00	7,06	1,435
Coercion	1,33	8,67	5,26	1,360
Segregation	1,00	8,67	2,99	1,422
Avoidance	1,00	9,00	4,51	1,947

SD = standard deviation.

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Table 2 - Comparison of means for each dimension in AQ-27 according to the year

	Mean		SD		t	p
	1st year	6th year	1st year	6th year		
Responsibility	2,56	2,44	0,813	0,941	0,737	0,462
Pity	5,98	5,62	1,713	1,479	1,182	0,240
Anger	2,87	2,52	1,145	1,287	1,534	0,128
Dangerousness	3,75	3,54	1,827	1,652	0,641	0,523
Fear	3,78	3,46	1,949	1,664	0,907	0,367
Help	7,22	6,87	1,307	1,569	1,289	0,200
Coercion	5,33	5,17	1,363	1,364	0,620	0,537
Segregation	3,33	2,58	1,394	1,360	2,844	0,005*
Avoidance	4,66	4,32	1,898	2,009	0,918	0,361

SD = standard deviation.
* p< 0.050.

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Table 3 - Comparison of means using T-test accordingly to the year of studies related to each item of AQ-27

		n		Mean		SD		t	p
		1st year	6th year	1st year	6th year	1st year	6th year		
Responsibility	**I would think that it was Harry's own fault that he is in the present condition.**			1,26	1,28	0,705	0,834	-0,121	0,904
	How controllable, do you think, is the cause of Harry's present condition?			4,39	4,18	1,735	1,870	0,623	0,535
	How responsible, do you think, is Harry for his present condition?			2,03	1,86	1,329	1,161	0,721	0,472
Pity	**I would feel pity for Harry.**			5,54	5,28	2,292	2,041	0,627	0,532
	How much sympathy would you feel for Harry?			5,00	4,84	2,273	2,084	0,383	0,702
	How much concern would you feel for Harry?			7,41	6,74	1,510	1,536	2,308	0,023*
Anger	**I would feel aggravated by Harry.**			3,69	3,34	1,858	1,803	0,997	0,321
	How angry would you feel at Harry?			2,23	1,94	1,244	1,284	1,202	0,232
	How irritated would you feel by Harry?			2,70	2,28	1,442	1,457	1,537	0,127
Dangerousness	**I would feel unsafe around Harry.**			3,72	3,54	1,916	1,919	0,496	0,621
	How dangerous would you feel Harry is?			3,98	3,86	2,086	1,629	0,350	0,727
	I would feel threatened by Harry.			3,56	3,22	1,867	1,706	0,985	0,327
Fear	**Harry would terrify me.**			3,64	3,26	1,984	1,664	1,077	0,284
	How scared of Harry would you feel?			3,80	3,58	2,143	1,939	0,570	0,570

	How frightened of Harry would you feel?			3,89	3,54	2,082	1,717	0,939	0,350
Help	**I would be willing to talk to Harry about his problems.**			7,28	7,26	1,845	1,712	0,055	0,956
	How likely is it that you would help Harry?			7,87	7,38	1,231	1,677	1,717	0,090
	How certain would you feel that you would help Harry?			6,51	5,96	1,556	2,166	1,500	0,137
Coercion	**If I were in charge of Harry's treatment, I would require him to take his medication.**			7,44	8,18	1,669	1,190	-2,711	0,008*
	How much do you agree that Harry should be forced into treatment with his doctor even if he does not want to?			5,69	5,14	1,954	2,857	1,154	0,252
	If I were in charge of Harry's treatment, I would force him to live in a group home.			2,85	2,18	1,721	1,574	2,128	0,036*
Segregation	**I think Harry poses a risk to his neighbors unless he is hospitalized.**			4,00	3,24	1,906	1,721	2,183	0,031*
	I think it would be best for Harry's community of he were put away in a psychiatric hospital.			3,64	2,66	1,693	1,768	2,972	0,004*
	How much do you think an asylum, where Harry can be kept away from his neighbors, is the best place for him?			2,34	1,84	1,559	1,490	1,730	0,086
Avoidance	**If I were an employer, I would interview Harry for a job.**			5,26	5,60	2,435	2,515	-0,716	0,475
	I would share a car pool with Harry every day.			4,77	5,58	2,291	2,331	-1,838	0,069
	If I were a landlord, I probably would rent an apartment to Harry.			5,98	5,86	2,255	2,507	0,273	0,785

SD = standarddeviation.
* p< 0.050.

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Table 4 - Comparison of means using T-test accordingly to experience of having gone to a psychological consultation related to the dimensions of AQ-27

	n		**Mean**		**SD**		**t**	**p**
	No	Yes	No	Yes	No	Yes		
Responsibility	65	46	2,50	2,51	0,904	0,834	-0,071	0,944
Pity			5,82	5,82	1,538	1,735	0,005	0,996
Anger			2,86	2,51	1,311	1,056	1,464	0,146
Dangerousness			3,77	3,50	1,692	1,825	0,799	0,426
Fear			3,80	3,40	1,667	2,023	1,143	0,255
Help			6,80	7,43	1,520	1,229	-2,400	0,018*
Coercion			5,20	5,33	1,375	1,348	-0,507	0,613
Segregation			3,15	2,76	1,528	1,239	1,441	0,152
Avoidance			4,72	4,21	1,936	1,945	1,359	0,177

SD = standarddeviation.
* p< 0.050.

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Table 5 - Comparison of means using T-test accordingly to experience of having gone to a psychiatric consultation related to the dimensions of AQ-27

	n		**Mean**		**SD**		**t**	**p**
	No	Yes	No	Yes	No	Yes		
Responsibility	89	22	2,551	2,333	0,878	0,842	1,047	0,297
Pity			5,963	5,242	1,555	1,758	1,895	0,061
Anger			2,805	2,348	1,210	1,211	1,585	0,116
Dangerousness			3,768	3,212	1,664	2,025	1,342	0,182
Fear			3,715	3,303	1,739	2,153	0,948	0,345
Help			6,966	7,439	1,397	1,555	-1,391	0,167

Coercion			5,266	5,212	1,277	1,686	0,140	0,890
Segregation			3,139	2,394	1,478	0,990	2,238	0,027*
Avoidance			4,663	3,879	1,849	2,241	1,706	0,091

SD = standarddeviation.
* p< 0.050.

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Agradecimentos

Quero expressar um agradecimento especial à Dr.ª Rosário Curral por me ter permitido a realização deste projeto e pela sua orientação e incentivo ao longo deste trajeto.

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Não posso deixar de agradecer aos meus colegas que participaram nesta investigação pois sem eles este trabalho não seria possível.

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Por fim, agradeço aos meus pais por estarem sempre a meu lado.

INSTRUCTIONS FOR AUTHORS

Contents

1. Aims and Scope

The International Journal of Clinical Neurosciences and Mental Health is an open-access peer-reviewed journal published trimonthly by ARC Publishing.

Our goal is to provide high-quality publications in the areas of Psychiatry and Mental Health, Neurology, Neurosurgery and Medical Psychology. Expert leaders in these medical areas constitute the international editorial board.

The journal publishes original research articles, review articles, drug reviews, case reports, case snippets, viewpoints, letters to the editor, editorials and guest editorials.

The International Journal of Clinical Neurosciences and Mental Health follows the highest scientific standards, such as the CONSORT / STROBE guidelines and the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (ICJME).

The journal offers:

- Trusted peer review process
- Fast submission-to-publication time
- Open-access publication without author fees
- Multidisciplinary audience and global exposure

2. Types of papers

The International Journal of Clinical Neuroscience and Mental Health publishes scientific articles in the following categories:

- Original research articles.
- Reviews.
- Drug reviews.
- Case reports.
- Case snippets.
- Viewpoints.
- Letters to the editor.
- Editorials and guest editorials.

2.1. Original research articles

The International Journal of Clinical Neurosciences and Mental Health welcomes original clinical research related with psychiatry, mental health, medical psychology, neurosurgery and neurology.

Reports of randomized clinical trials should follow the CONSORT Guidelines and reports of observational studies should comply with STROBE Guidelines.

Body text of an Original Research Article should have no more than 4000 words (word count excludes title page, abstract, acknowledgments, references and tables). A maximum of 6 illustrations (figures or tables) are allowed. Supplementary online material may be submitted at the editor discretion.

2.2. Review articles and Drug Reviews

Review articles on CNS-related drugs, psychiatry, mental health, medical psychology, neurosurgery and neurology topics are welcome. Both invited and unsolicited submissions are accepted.

Manuscripts should be limited to a maximum of 4,500 words, excluding title page, abstract, acknowledgments, references and tables.

2.3. Case reports and case snippets

Case Reports and Case Snippets should have no more than 750 and 500 words, respectively (word count excludes references); one figure or table can be included.

Only highly meaningful Case Reports are accepted, including major educational content or major clinical findings. Case Snippets should describe a diagnosis or therapeutic challenge.

2.4. Viewpoints

Viewpoints should provide an expert opinion on important topics for medical research or practice, with possibility for covering social and policy aspects. This section encourages dialogue and debate on relevant issues with expert views based on evidence.

Viewpoints are limited to 1500 words (word count excludes references) and can include one figure or table.

2.5. Letters to the Editor

Letters to the Editor should share views on published articles, any findings insufficient for a research article or present ideas of any subject in the scope of the journal.

Letters to the Editor have a maximum of 600 words (including references) and can include one figure or table.

2.6. Editorials and Guest Editorials

Authors are invited by the Editor-in-Chief to comment on specific topics and express their opinions. Editorials and Guest Editorials have a maximum of 1,000 words and can include one figure or table.

3. Manuscript Submission

These instructions advise on how the manuscript should be prepared and submitted. Manuscripts that do not comply with the guidelines will not be considered for review.

All manuscripts should be prepared in A4-size or US-letter size, in UK or US English.

Manuscripts should be submitted in *.doc and *.pdf formats, in the appropriate section of the journal website: IJCNMH online submission.

3.1. Cover Letter

A cover letter should be submitted together with the manuscript, in *.doc or *.pdf format, addressed to the Editor-in-Chief.

A template for the cover letter is available for download.

The cover letter should contain statements about originality of your publication, Ethics Committee approval and informed consent (if applicable), conflicts of interest and why in your opinion your manuscript should be published.

3.2. Manuscript Preparation

The manuscript must be divided in 2 files: the Title page (submitted in *.doc format and *.pdf formats) and the Manuscript body (submitted in *.doc and *.pdf formats).

Title page

This should be submitted as a separate file from your manuscript (to assure anonymity in the peer review process) and should include:

- Article title.
- Authors' names, titles (e.g. MD, PhD, MSc, etc.) and institutional affiliations.
- Corresponding author: name, mailing address, telephone and fax numbers.
- Keywords (maximum of 10).
- A running head (up to 50 characters).
- Abstract word count (up to 250 words).
- Body text word count.
- The number of figures and tables.

Manuscript body:

The Manuscript body must be anonymous, not containing the names or affiliations of the authors. Manuscript body must be structured in the following order: title, abstract, body text, acknowledgements, references, tables, and figures captions/legends.

- The text must be formatted as follow:
- Arial fonts, size: 11 points.
- Single line spacing (see paragraph menu).
- Aligned to the left (not justified).

Showing continuous line numbers on the left border of the page. For MS Word you can add line numbers by going to: Page Layout -> Line Numbers -> select "Continuous"; for OpenOffice: Tools -> Line Numbering -> tick "Show numbering".

Title

A descriptive and scientifically accurate article title should be provided.

Abstract (250 words maximum)

An abstract should be prepared for Original Research Articles, Review Articles and Drug Reviews.

Should be structured and include: background/objective, material and methods, results, and conclusions. These sections should be separated by the respective headings.

If the publication is associated with a registered clinical trial, the trial registration number should be referred at the end of the abstract.

Body text

Original research articles

Original research articles should be structured as follows:

Introduction: Should present the background for the investigation and justify its relevancy. Claims should be supported by appropriate references. Introduction should end by stating the objectives of the study.

Methods: Should allow the reproduction of results and therefore must provide enough detail. Appropriate subheadings can be included, if needed.

Results: Should include detailed descriptions of generated data. This section can be separated into subsections with concise self-explanatory subheadings.

Discussion and Conclusions: Should be brief but comprehensive and well argued, summarise and discuss the main findings, their clinical relevance, the strengths and limitations of the study, future perspectives with suggestion of experiments to be addressed in the future.

Review articles and Drug Reviews

These types of articles should be organized in sections and subsections.

Acknowledgements

This section should name everyone who has contributed to the work but does not qualify as an author. People mentioned in this section must be informed and only upon consent should their names be included along with their contributions. Financial support (with grant number, if applicable) should also be stated here.

Any conflict of interests should be declared. If authors have no declaration it should be written: "The authors declare no conflict of interests".

References

References citation in the text should be numbered sequentially along the text, within brackets.

The use of a reference management tool (such as Endnote or Reference Manager) is recommended. References must be formatted in Vancouver style.

Only published or accepted for publication material can be referenced. Personal communications can be included in the text but not in the references list.

Tables

Tables should be smaller than a page, without picture elements or text boxes. Tables should have a concise but descriptive title and should be numbered in Arabic numerals. Table footnotes should explain any abbreviations or symbols that should be indicated by superscript lower-case letters on the body table.

Figures

Figures should have a concise but descriptive title and should be numbered in Arabic numerals. If the article is accepted for publication, the authors may be asked to submit higher resolution figures. Copyright pictures shall not be published unless you submit a written consent from the copyright holder to allow publishing.

Each figure file shall not be larger than 30MB.

Figures should be tested and printed on a personal printer prior submission. The printed image, resized to the intended dimensions, is almost a replication of how the picture will look online. It shall be clearly perceived, non-pixelated nor grainy. Only flattened versions of layered images are allowed. Each figure can only have a 2-point white space border, thus cropping is strongly advised. For text within figures, Arial fonts between 8 to 11 points should be used and must be readable. When symbols are used, the font information should be embedded.

Photographs should be submitted as *.tif or *.eps at high-resolution (300 dpi or more). Graphics should be submitted in *.eps format. MS Office graphics are also acceptable.

All figures, tables and graphics should have white background and not transparent.

Lines, rules and strokes should be between 0.5-1.5 points for reproducibility purposes.

3.3. Supporting Information

Code of Experimental Practice and Ethics

The minimal ethics requirements are those recommended by the Code of Ethics of the World Medical Association (Declaration of Helsinki). Authors should provide information regarding ethics on research participants, patient informed consent, data privacy as well as competing interests. If the authors have submitted a related manuscript elsewhere should disclose this information prior submission.

Nomenclature

All units should be in International System (SI). Drugs should be designated by their International Non-Proprietary Name (INN).

3.4. Submission Checklist

Please ensure you have addressed the following issues prior submission:

- Details for competing interests.
- Details for financial disclosure.
- Details for authors contribution.
- Participants informed consent statement.
- Contributor copyright authorization of figures included in the manuscript, not produced by the authors and subjected to copyright.
- Authorship, affiliations and email addresses are correct.

- Cover letter addressed to the Editor-in-Chief.
- Identification of potential reviewers and their email addresses (to be introduced at the online submission platform).
- Manuscript, figure and tables comply with the author guidelines, including the correct format, SI units and standard nomenclature.
- Separated files for Title page (*.doc and *.pdf) and Manuscript body (*.doc and *.pdf)—4 in total.
- Manuscript body does not contain the names or affiliations of the authors.

If you have any questions, please contact ijcnmh@arc-publishing.org

4. Overview of the Editorial Process

The International Journal of Clinical Neurosciences and Mental Health aims to provide an efficient and constructive view of the manuscripts submitted to achieve a high quality level of publications. The editorial board is constituted by expert leaders in several areas of medicine particularly in Clinical Neuroscience and Mental Health.

Once submitted, the manuscript is assigned to an editor which evaluates and decides whether the manuscript is accepted for peer-review. At this initial phase, the editor evaluates if the manuscript fulfils the scope of the journal according to the content and minimum quality standards. For peer-review, one or two additional expert field editors will comment on the manuscript and decide on whether it is accepted for publishing with minor corrections or not accepted for publishing. The editor may ask authors to resubmit after major revision. Decision is based on technical and scientific merits of the work. Reviewers can be asked to be disclosed or stay anonymous. Authors can exclude specific editors or reviewers from the process, upon submission, a rational should be provided.

Upon evaluation, an email is sent to the corresponding author with the decision. If accepted, the manuscript enters the production process. It takes approximately 6-7 weeks for the manuscript to be published.

4.1. Appeal Process

The editors will respond to appeals from authors which manuscripts were rejected. Their interests should be sent to the Editor.

Two directions can be followed:

- If the Editor does not accept the appeal, further right to appeal is denied.
- If the Editor accepts the appeal, a further review will be asked. After the new review, the editor can reject or accept the appeal. If rejected, nothing else can be done, if accepted the author is able to resubmit the manuscript.

The reasons for not accepting a manuscript for consideration can be:

- The manuscript does not follow the scope of the journal.
- The manuscript has potential interest but there are methodological concerns after peer-review or editorial examination.

Questionário de Atribuição AQ 27[1], de Corrigan, 2003

Cotação do AQ-27

O AQ é constituído por 9 factores, cotados pela soma dos itens tal como é definido a seguidamente:

Responsabilidade = QA10+ QA11 +QA23

Pena = QA9 + QA22 + QA27

Irritação = QA1 + QA4 + QA12

Perigosidade = QA2 + QA13 + QA18

Medo = QA3 + QA19 + QA24

Ajuda = QA8 + QA20 + QA21

Coacção = QA5 + QA14 + QA25

Segregação = QA6 + QA15 + QA17

Evitamento = QA7 + QA16 + QA26

Quanto maior é a cotação do factor, mais este está representado no sujeito.

A cotação é invertida nos itens QA7, QA16 e QA26.

No final do questionário podem-se encontrar histórias alternativas.

[1] Versão para investigação elaborada por S. Sousa, C. Queirós, A. Marques, N. Rocha & A. Fernandes (2008), traduzida do original A.Q. - 27 (P. Corrigan et al., 2003).

POR FAVOR LEIA A SEGUINTE INFORMAÇÃO SOBRE O JOSÉ:

O José é um homem com 30 anos de idade, solteiro e com Esquizofrenia. Às vezes ouve vozes e fica perturbado. O José vive sozinho num apartamento e trabalha como estafeta num grande escritório de advogados. Já foi internado seis vezes devido à sua doença.

AGORA RESPONDA A CADA UMA DAS QUESTÕES QUE SE SEGUEM SOBRE O JOSÉ. MARQUE COM UMA CRUZ O NÚMERO QUE MELHOR CORRESPONDE À SUA RESPOSTA

1. Eu iria sentir-me incomodado pelo José.

1	2	3	4	5	6	7	8	9
nada								muito

2. Eu iria sentir-me inseguro perto do José.

1	2	3	4	5	6	7	8	9
não, nada								sim, muito

3. O José iria assustar-me.

1	2	3	4	5	6	7	8	9
nada								muito

4. Até que ponto ficaria zangado com o José?

1	2	3	4	5	6	7	8	9
nada								muito

5. Se eu fosse responsável pelo tratamento do José, pediria para ele tomar a medicação.

1	2	3	4	5	6	7	8	9
nada								muito

6. Penso que o José coloca a sua vizinhança em risco se não for internado.

1	2	3	4	5	6	7	8	9
Nada								muito

7. Se eu fosse um empregador, entrevistaria o José para um emprego.

1	2	3	4	5	6	7	8	9
nada provável								muito provável

8. Eu estaria disposto a conversar com o José sobre os seus problemas.

1	2	3	4	5	6	7	8	9
nada								muito

9. Eu iria sentir piedade pelo José.

1	2	3	4	5	6	7	8	9
nenhuma								muita

10. Eu iria pensar que o José é o culpado da sua situação actual.

1	2	3	4	5	6	7	8	9
não, não concordo nada								sim, concordo muito

11. Até que ponto acha que é controlável a causa da situação actual do José?

1	2	3	4	5	6	7	8	9
nada dependente do controle pessoal								completamente dependente do controle pessoal

12. Até que ponto se sentiria irritado com o José?

1	2	3	4	5	6	7	8	9
nada								muito

13. Até que ponto sentiria que o José é perigoso?

1	2	3	4	5	6	7	8	9
nada								muito

14. Até que ponto concorda que o José deveria ser forçado a tratar-se com o seu médico mesmo que ele não quisesse?

1	2	3	4	5	6	7	8	9
nada								muito

15. Eu penso que seria melhor para a comunidade onde o José está inserido se ele fosse colocado num hospital psiquiátrico.

1	2	3	4	5	6	7	8	9
nada								muito

16. Eu partilharia uma boleia de carro com o José, todos os dias.

1	2	3	4	5	6	7	8	9
nada provável								muito provável

17. Até que ponto acha que um asilo, onde o José pudesse estar afastado da sua vizinhança, seria o melhor local para ele?

1	2	3	4	5	6	7	8	9
nada								muito

18. Eu iria sentir-me ameaçado pelo José.

1	2	3	4	5	6	7	8	9
não, nada								sim, muito

19. Até que ponto sentiria medo do José?

1	2	3	4	5	6	7	8	9
nada								muito

20. Até que ponto estaria disposto a ajudar o José?

1	2	3	4	5	6	7	8	9
definitivamente não o ajudaria								definitivamente ajudaria-o

21. Até que ponto tem a certeza de que iria ajudar o José?

1	2	3	4	5	6	7	8	9
nenhuma certeza								certeza absoluta

22. Até que ponto sentiria pena do José?

1	2	3	4	5	6	7	8	9
nenhuma								muita

23. Até que ponto acha que o José é responsável pela sua situação actual?

1	2	3	4	5	6	7	8	9
nada responsável								muito responsável

24. Até que ponto se iria sentir assustado pelo José?

1	2	3	4	5	6	7	8	9
nada								muito

25. Se eu fosse responsável pelo tratamento do José, iria forçá-lo a viver numa residência comunitária.

1	2	3	4	5	6	7	8	9
nada								muito

26. Se eu fosse senhorio, provavelmente alugaria um apartamento ao José.

1	2	3	4	5	6	7	8	9
nada provável								muito provável

27. Até que ponto se iria preocupar com o José?

1	2	3	4	5	6	7	8	9
nada								muito

Questionário de Atribuição – Histórias alternativas

Condição 1 - sem perigo

José é um homem com 30 anos de idade, solteiro e com Esquizofrenia. Apesar de às vezes o José ouvir vozes e ficar perturbado, nunca foi violento. Como a maior parte das pessoas com Esquizofrenia, o José não é mais perigoso do que outra pessoa qualquer. Ele vive num apartamento e trabalha como estafeta num escritório de advogados. Os seus sintomas são habitualmente controlados com medicação apropriada.

Condição 2 - perigo

José é um homem com 30 anos de idade, solteiro e com Esquizofrenia. A última vez que os seus sintomas pioraram, ele ouviu vozes e acreditou que os seus vizinhos estavam a planear atacá-lo. Ele atacou a sua senhoria acreditando que ela estava envolvida no plano. Quando a Polícia o acompanhou até ao hospital ele tentou tirar a arma do agente. Ele perturbou a ordem da sala de urgência e teve de ser colocado num lugar restrito. O José só se acalmou quando lhe deram uma grande dose de medicação.

Condição 3 - perigo sem controlo de causa

José é um homem com 30 anos de idade, solteiro e com Esquizofrenia. A última vez que os seus sintomas pioraram, ele ouviu vozes e acreditou que os seus vizinhos estavam a planear atacá-lo. Ele atacou a sua senhoria acreditando que ela estava envolvida no plano. Quando a Polícia o acompanhou até ao hospital, ele tentou tirar a arma do agente. Ele perturbou a ordem da sala de urgência e teve de ser colocado num lugar restrito. A sua doença mental foi causada por um acidente de carro, quando ele tinha 22 anos. Nesse acidente bateu com a cabeça e sofreu danos. O distúrbio mental leva à violência sempre que o José sofre de enxaquecas, também causadas pelo acidente.

Condição 4 - perigo com controlo de causa

José é um homem com 30 anos de idade, solteiro e com Esquizofrenia. A última vez que os seus sintomas pioraram, ele ouviu vozes e acreditou que os seus vizinhos estavam a planear atacá-lo. Ele atacou a sua senhoria acreditando que ela estava envolvida no plano. Quando a Polícia o acompanhou até ao hospital, ele tentou tirar a arma do agente. Ele perturbou a ordem da sala de urgência e teve de ser colocado num lugar restrito. A sua doença mental foi causada por oito anos de abuso de drogas ilegais. A doença mental leva à violência sempre que ele inala cocaína.